

# Testing Component Interaction

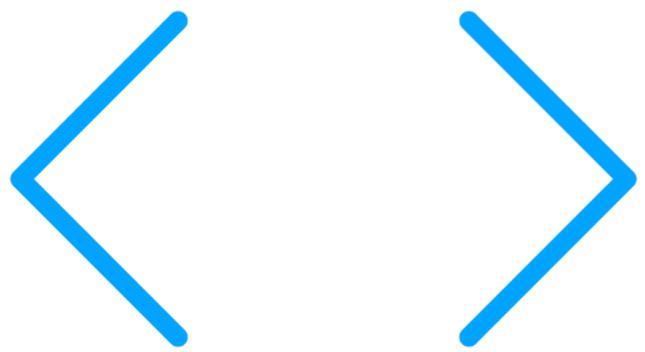


**Liam McLennan**

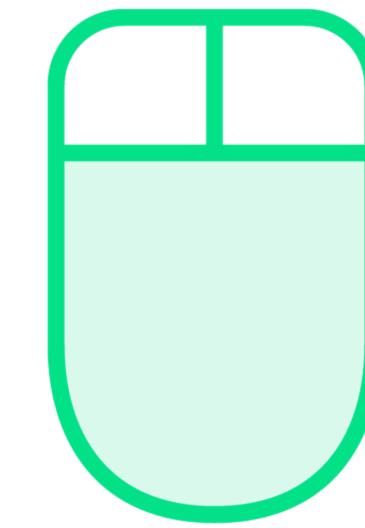
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# What Are We Testing?



**Rendering**



**User Interaction**



# Required Tools

**JavaScript runtime**

**JavaScript test runner**

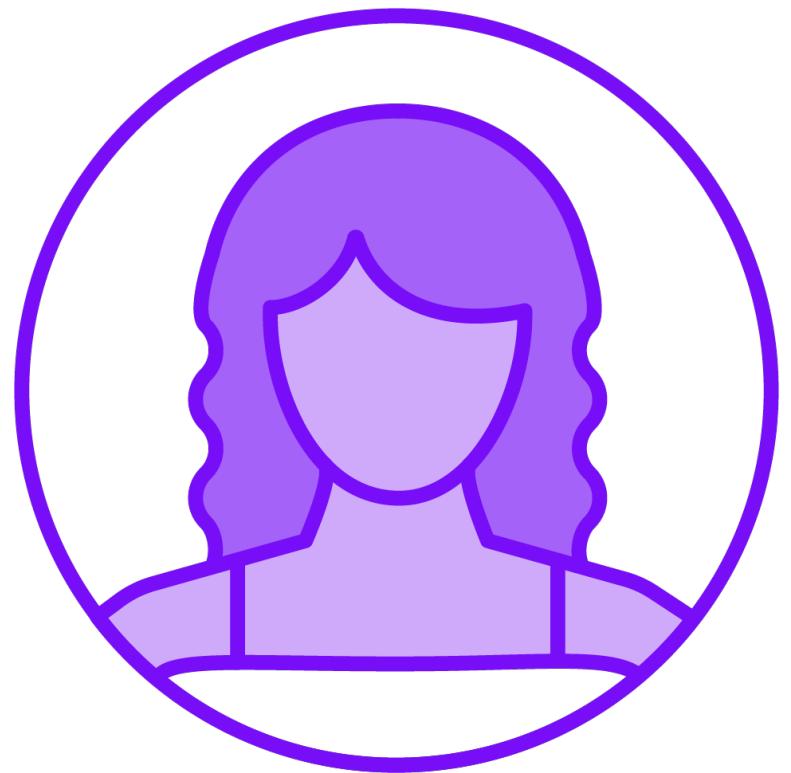
**Test assertion library**

**DOM and HTML environment**

**UI testing library**



# Interaction APIs



**user-event**



**fireEvent**



# user-event API



**Interaction methods are asynchronous**  
**Call setup() before rendering**



# user-event API

```
import userEvent from '@testing-library/user-event';
```

```
test('complete form', async () => {
  const user = userEvent.setup();
  render(<Home/>);
```

```
  const nameInput = screen.getByLabelText(/name/i);
  await user.type(nameInput, "Trevor");
```

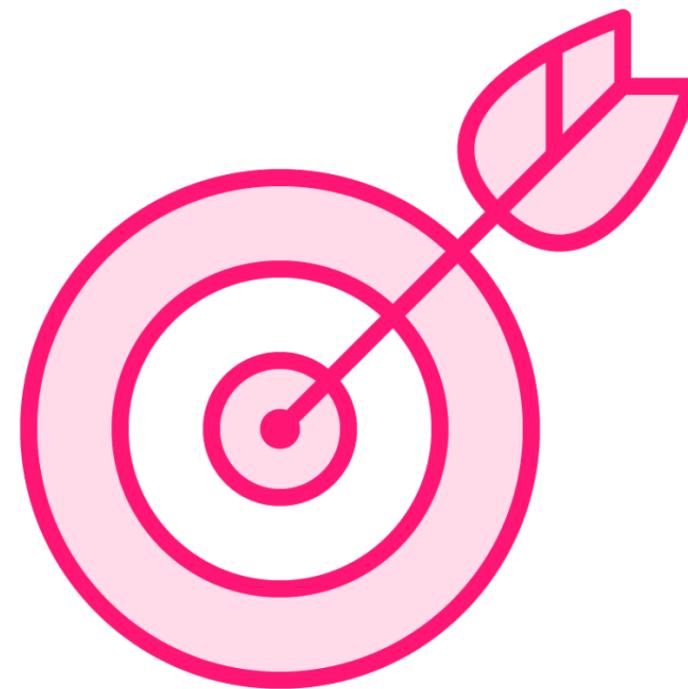
```
  const submitButton = screen.getByRole(
    'button',
    { name: /submit/i });
```

```
  await user.click(submitButton);
```

```
// assert something
});
```



# fireEvent API



**Trigger any event on any element**  
**Be aware of limitations**  
**Interaction methods are synchronous**



# fireEvent API

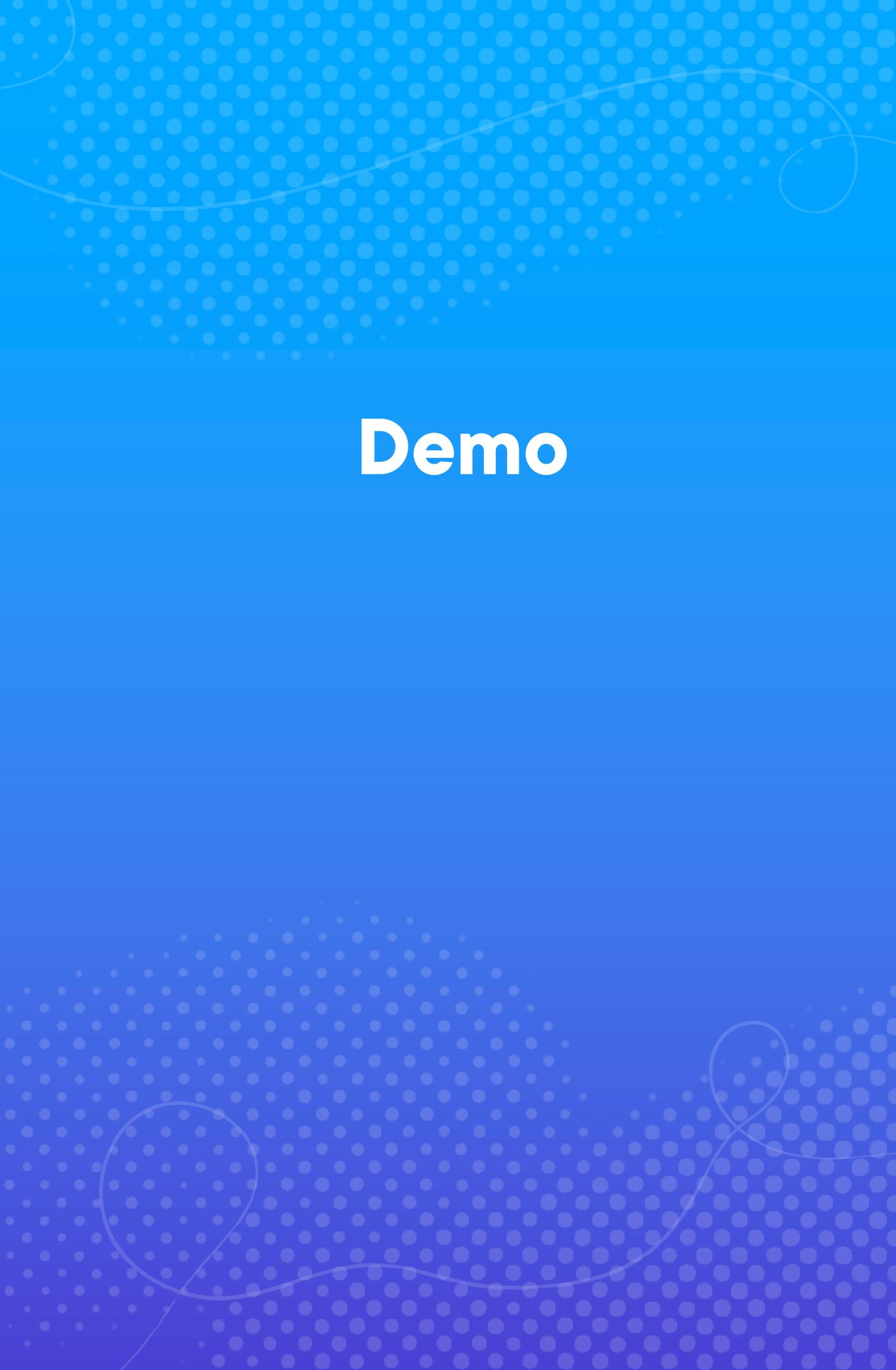
```
test('complete form', () => {
  render(<Home/>);

  const nameInput = screen.getByLabelText(/name/i);
  fireEvent.change(nameInput, {target: {value: "Trevor"}});

  const submitButton = screen.getByRole(
    'button',
    { name: /submit/i });
  fireEvent.click(submitButton);

  // assert something
});
```





# Demo

## Testing Interaction



# Summary

**user-event and fireEvent APIs**

